

Empowering Your Business with

3D Printing



POWERING CONNECTIONS



Rapid Prototyping & Additive Manufacturing

- ✓ **Rapid Prototyping and Custom Part Manufacturing:** Provision of additive manufacturing services utilizing various 3D printing technologies (e.g., FDM, SLA, SLS, DMLS) for rapid prototyping, functional part production, and low-volume manufacturing of complex geometries and customized components.
- ✓ **Advanced Material Capabilities:** Expertise in processing a wide range of engineering-grade materials, including high-performance polymers (e.g., PEEK, ULTEM), composites (e.g., carbon fiber reinforced nylon), and various metals (e.g., Stainless Steel, Aluminum, Titanium) to meet specific mechanical, thermal, and chemical requirements.
- ✓ **Design Optimization for Additive Manufacturing (DfAM):** Consulting and design services focused on optimizing part geometries for 3D printing, including topology optimization, lattice structures, weight reduction, and part consolidation, to maximize performance and minimize material usage.
- ✓ **Small to Medium Batch Production:** Scalable 3D printing solutions for producing small to medium batches of end-use parts, jigs, fixtures, and tooling, offering cost-effective alternatives to traditional manufacturing methods for specialized applications.

Technical Specifications

Features

- ✓ Printing Technology
- ✓ Materials (Polymers)
- ✓ Materials (Metals)
- ✓ Build Volume
- ✓ Layer Resolution
- ✓ Design Software
- ✓ Post-Processing
- ✓ Applications
- ✓ Accuracy
- ✓ Surface Finish

Specifications

- ✓ Fused Deposition Modeling (FDM), Stereolithography (SLA), Selective Laser Sintering (SLS), Direct Metal Laser Sintering (DMLS), Binder Jetting
- ✓ PLA, ABS, PETG, Nylon (PA6, PA12), Polycarbonate (PC), PEEK, ULTEM, TPU, Resins (Standard, Engineering, Dental)
- ✓ Stainless Steel (316L, 17-4PH), Aluminum (AlSi10Mg), Titanium (Ti6Al4V), Inconel (718, 625)
- ✓ Up to 1000 x 1000 x 1000 mm (for large format FDM/SLS); up to 400 x 400 x 400 mm (for DMLS)
- ✓ FDM: 0.05mm - 0.3mm; SLA: 0.025mm - 0.1mm; SLS: 0.06mm - 0.15mm; DMLS: 0.02mm - 0.06mm
- ✓ SolidWorks, AutoCAD, Fusion 360, CATIA, Rhino, Blender, OpenSCAD
- ✓ Support Removal, Sanding, Polishing, Painting, Vapor Smoothing, Heat Treatment, Machining
- ✓ Rapid Prototyping, Functional Parts, Jigs & Fixtures, Tooling, End-Use Components, Medical Devices, Art & Design, Spare Parts Manufacturing
- ✓ $\pm 0.1\text{mm}$ or $\pm 0.1\%$ (whichever is greater) for polymers; $\pm 0.05\text{mm}$ or $\pm 0.05\%$ for metals
- ✓ Ra 3.2-6.3 μm (FDM), Ra 0.8-1.6 μm (SLA), Ra 6.3-12.5 μm (SLS), Ra 5-10 μm (DMLS)

Why Choose Us?

- 01. Accelerated Innovation Cycle:** Our advanced 3D printing capabilities enable rapid iteration from concept to functional prototype, drastically reducing development timelines and accelerating your product innovation and time-to market.
- 02. Unleash Design Complexity:** We empower you to create highly complex, customized geometries and internal structures impossible with traditional manufacturing, unlocking new levels of performance, lightweighting, and functional integration for your components.
- 03. Versatile Material Solutions:** With expertise across a broad spectrum of engineering-grade polymers, composites, and metals, we provide tailored material selection and processing to meet the most demanding mechanical, thermal, and environmental requirements of your application.

GET IN TOUCH WITH US

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